5

10

## ABSTRACT OF THE DISCLOSURE

A method of embedding an additional layer of error correction into an error correcting code, wherein information is encoded into code words of said code over a first Galois field and wherein a number of code words are arranged in the columns of a code block comprising a user data sub-block and a parity data sub-block, provides an additional layer of error correction that can be easily implemented without losing compatibility improving the error correction capabilities. The method includes the steps of:

- encoding the rows of at least the user data sub-block separately or in groups using a horizontal error correcting code over a second Galois field larger than the first Galois field to obtain horizontal parities, and
- 15 embedding the horizontal parities as additional layer in the error correcting code.